Human-Computer Interaction Of Single/Three Phase Transformer Designand Performance

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Summary

This paper presents a menu-driven, easy-to-use computer package which has been tailored at this stage to assist: (1) young electrical engineers in industry to visualize and enhance the practical use of theoretical and analytical brief notes learned in typical energy conversion courses taken at the undergraduate level, and enable them to have confidence, industry know-how process and sufficient design and performance evaluation skills on the different types of transformers; and (2) in teaching electrical machines laboratory skills to power engineering students by an interactive step-by-step approach. All experiments performed on transformers can be handled by the software to illustrate transformer design and performance details. The scope of this package is to present transformer performance in an interactive logical design procedure and to calculate core/yoke/sheets dimensions, low and high voltage winding's number of turns/layers, axial length and other related dimensions